

TRAM flaps. The risk factors for transfusion include obesity, peri-operative anaemia and bilateral cases. There are contradictory reports regarding immediate procedures being a risk factor. The data is variable with lack of consistency, emphasising the importance of a systematic analysis of the studies.

**Conclusion:** We have identified the most common predictors for post operative transfusion for DIEP and TRAM flaps. This information is valuable to patients and clinicians during preoperative counselling and consent.

#### 0495: IMPROVING POST OPERATIVE PAIN MANAGEMENT IN SUBPECTORAL TISSUE EXPANDER IMPLANT RECONSTRUCTION OF THE BREAST USING AN ELASTOMERIC PUMP

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**Aim:** Postoperative pain after breast surgery leads to delayed mobilization and prolonged stay. We performed a retrospective analysis of patients undergoing skin-sparing mastectomy and subpectoral implant reconstruction. Hypothesis: Does the use of an elastomeric local anaesthetic pump improve pain control and length of stay (LOS).

**Methods:** 25 consecutive patients undergoing the above procedure were sited with an elastomeric local anaesthetic infusion pump intra-operatively, in addition to standard regular and PRN analgesia. The control group contained 25 patients undergoing the same procedure receiving standard analgesia alone. Visual Analogue Scales (VAS) were recorded at 24 hours in addition to PRN analgesic requirements.

**Results:** Median age was 51 (26–75) in the intervention group and 50 (28–70) in the control. Mean VAS score was 0.28 (0.61SD) at 24 hours in the intervention group and 1.84 (0.37SD) in the control,  $p < 0.0001$ . Mean LOS was 1.8 days (0.71 SD), and 2.28 days (0.94 SD) in the control,  $p = 0.252$ . There were no complications involving catheter placement, local anaesthetic leakage or toxicity.

**Conclusion:** We found significantly reduced pain and trend towards reduced and length of stay with the local anaesthetic infusion pump. The elastomeric pump is a step towards enhanced patient recovery following mastectomy and implant reconstruction.

#### 0521: EXPLORING THE POTENTIAL OF USING THE TRAINEE COLLABORATIVE MODEL TO DELIVER HIGH-QUALITY, LARGE-SCALE PROSPECTIVE MULTICENTRE STUDIES IN RECONSTRUCTIVE BREAST SURGERY: THE IBRA (IMPLANT BREAST RECONSTRUCTION EVALUATION) STUDY

On behalf of the Breast Reconstruction Research Collaborative *Breast Reconstruction Research Collaborative, United Kingdom*

**Aim:** The introduction of techniques to augment the subpectoral pocket has revolutionised the practice of implant-based breast reconstruction (IBBR), but evidence to support the safety and efficacy of these techniques is lacking. High-quality data are required, but large prospective cohort-studies are expensive and time-consuming. Adoption of the trainee research collaborative model may effectively overcome these barriers.

We report early experience with the iBRA (implant Breast Reconstruction evaluation) study which has employed this innovative methodology in breast-surgery for the first time.

**Methods:** The iBRA study has 4-phases that aim to inform the feasibility and conduct of a future RCT including a national practice questionnaire (NPQ) and prospective audit.

Trainee leads have been identified at each centre via the Mammary Fold and Reconstructive Surgery Trials Network. Leads are responsible for completing the NPQ with the support of a lead consultant and identifying patients for the prospective audit, collecting in-hospital and 30-day outcome data and obtaining consent for patient-reported outcome questionnaires.

**Results:** Between May-Dec 2014, 67 units have completed the NPQ. Over 100 collaborators have recruited 328 patients from 35 centres and the study is running 6-months ahead of schedule.

**Conclusion:** The iBRA study has demonstrated that the trainee collaborative model is an effective means delivering large-scale prospective studies in breast-surgery.

#### 0529: LOCAL RECURRENCE FOLLOWING BREAST CONSERVING SURGERY FOR DUCTAL CARCINOMA IN-SITU: THE EDINBURGH EXPERIENCE

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**Aim:** Ductal carcinoma in-situ (DCIS) represents 5% of symptomatic and 50% of screen-detected breast malignancies. Historically managed with mastectomy, providing excellent long-term outcomes, Breast Conserving Surgery (BCS) +/- adjuvant radiotherapy now represents the mainstay management option for DCIS providing better cosmetic outcomes with no adverse impact on overall survival. The main drawback of BCS remains local recurrence – DCIS or invasive breast cancer, which are associated with significant morbidity and mortality. Given advances in DCIS management, the study aims to compare local recurrence rates as well as 'time to recurrence' over the last 10 years to previously published data from the Edinburgh breast unit.

**Methods:** Retrospective single-centre study of patients with histologically confirmed primary DCIS who underwent BCS between January 2000 and January 2010.

**Results:** Of the 477 eligible patients, 7.8% ( $n = 37$ ) developed local recurrence following BCS (median follow-up = 63 months), a significant decrease from 15% previously reported within the same unit. The median time-to-recurrence was 27 months. There is also trend towards decreasing local recurrence rates with increasing use of adjuvant radiotherapy.

**Conclusion:** Advances in DCIS management and widespread use of adjuvant radiotherapy have contributed to a significant reduction in local recurrence rates following BCS for DCIS.

#### 0530: EXPLORING VARIATIONS IN THE PROVISION AND PRACTICE OF IMPLANT-BASED BREAST RECONSTRUCTION IN THE UK: INITIAL RESULTS FROM THE IBRA NATIONAL PRACTICE QUESTIONNAIRE

On behalf of the Breast Reconstruction Research Collaborative *Breast Reconstruction Research Collaborative, United Kingdom*

**Aim:** The introduction of lower-pole sling-procedures has revolutionised the practice of implant-based breast-reconstruction (IBBR), but data regarding the availability and practice of these procedures is limited. The iBRA (implant Breast Reconstruction evaluation) Study aims to explore the practice and outcomes of IBBR to inform the feasibility of undertaking an RCT comparing techniques.

We report the early results of iBRA Phase-1, a National Practice Questionnaire (NPQ) which aims to comprehensively describe current national practice.

**Methods:** A questionnaire developed by the iBRA Steering-Group was completed by trainee and consultant leads at breast and plastic surgical units across the UK. Simple summary statistics were calculated and variations in service-provision, practice and adherence to guidelines evaluated.

**Results:** 44-units have completed the NPQ to-date. Variation was demonstrated in the provision of novel-techniques especially the availability of biological ( $n = 32$ , 72.7%) and synthetic ( $n = 10$ , 20.5%) meshes and in patient-selection. There was lack of consistency in peri and post-operative management particularly duration of antibiotic-use (induction-only vs. 14-day-course) and drain-policy (no-drains vs. 2-drains-for-14-days). Few units ( $n = 14$ , 37.8%) had written management protocols and only half ( $n = 20$ ) prospectively-audited their outcomes.

**Conclusion:** Early analysis of the iBRA-NPQ has demonstrated marked variation in the provision and practice of IBBR. Phase-2 of the iBRA Study will determine the safety and efficacy of different approaches to IBBR and allow evidence-based best practice to be explored.

#### 0571: ARTISS HUMAN FIBRIN SEALANT GLUE FOR MASTECTOMY FLAP ADHERENCE

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**Aim:** To demonstrate the role of human fibrin sealant glue for mastectomy flap adherence.

**Methods:** We audited the use of ARTISS fibrin sealant glue versus surgical drain placement for six months at a District General Hospital, looking at two primary endpoints; discharge within 23 hours and post-operative complications. All mastectomy patients were included and complications were identified up to 60 days. Data was collected prospectively from physical and electronic records.

**Results:** Complete data was collected for 18/19 patients who underwent mastectomy in the study period. The rate of discharge within 23 hours using fibrin sealant glue was 6/7 patients compared with 5/8 with surgical drains. For the four patients who had neither drain nor glue, two were discharged within 23 hours. The rate of seroma with fibrin glue was 1/7 versus 4/8 with a drain. Using neither drain nor glue 2/4 patients developed seromas and one was re-admitted.

**Conclusion:** The use of fibrin sealant glue resulted in reduced complications and earlier discharge compared with surgical drains for mastectomy patients in this small sample. Larger scale studies are required to demonstrate statistical significance, but fibrin sealant glue may negate the use of drains, expedite discharges and reduce costs from community nursing, prolonged admissions, drain complications and delays starting adjuvant treatment.

#### 0700: THE ROLE OF GUIDELINE REINFORCEMENT IN IMPROVING QUALITY OF REFERRALS TO A SPECIALIST BREAST CLINIC

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**Aim:** To assess the effect of redistributing Scottish Cancer Referral Guidelines to primary care in improving the quality of referrals to a specialist breast clinic in a Scottish DGH.

**Methods:** A previous audit showed 36% referrals from general practice were either inappropriate or of incorrect level of urgency. The Scottish Cancer Referral Guidelines were re-distributed to primary care physicians and referrals were re-audited over a 2 week period.

**Results:** 231 referrals were made in the study period. 33% were referred as routine. Of these, 65% were correct and 35% incorrect. Incorrect routine referrals should have been urgent according to guidelines (54%); the remainder should have been managed in primary care (46%). This was a 17% improvement over the previous audit. 67% patients were referred as urgent. Of these, 73% were correct while 27% were incorrect. 86% incorrect referrals should have been routine while 14% should have been managed in primary care. This was a 6% improvement over the previous audit.

**Conclusion:** Redistribution of the guidelines did improve the quality of referrals. Other methods of reinforcement are needed to further improve standards of referral from primary care and to give general practitioners the confidence to manage conditions not needing specialist care.

#### 0728: A REVIEW OF THE MANAGEMENT OF AXILLARY MICROMETASTASES IN BREAST CANCER

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**Aim:** Our local protocol suggests undertaking axillary node clearance (ANC) if a micrometastasis is found at sentinel lymph node biopsy (SLNB). With recent reports suggesting this may not be necessary, we reviewed our data between January 2012 and August 2014 (30 months)

**Methods:** A case note review was performed on all patients undergoing axillary surgery for breast cancer over a three year period. The form of axillary surgery, as well as the number of nodes retrieved was noted. We also noted whether there were micrometastases or macrometastases.

**Results:** 163 of a total of 358 patients (45.5%) underwent axillary node clearance (ANC). Of those, 87 (53.4%) were primary, and 76 (46.6%) following SLNB. From the 76 secondary ANCs, 21 (27.6%) only had micrometastases on SLNB. All underwent ANC. Out of the 21 ANCs for micrometastasis, only 2 patients (9.5%) had further nodal involvement. One with a further solitary micrometastasis, another had 2 involved nodes- one micrometastasis, one macrometastasis.

**Conclusion:** ANC with solitary micrometastases has been called into question, especially with improving adjuvant therapies. This data supports

that view and suggests that in almost 28% (21/76) of cases we may be unnecessarily increasing potential morbidity and cost by advocating ANC.

#### 0741: USE OF THE LATISSIMUS DORSI FLAP IN BREAST RECONSTRUCTION: THE PATIENT PERSPECTIVE

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**Aim:** The latissimus dorsi (LD) flap is one of many available methods of breast reconstruction following mastectomy. All methods carry key strengths and potential pitfalls; no method can exactly replace the lost breast. This study aims to assess patient perspective of outcome following breast reconstruction with LD flap.

**Methods:** 29 patients completed satisfaction surveys assessing aesthetic, pain and functional outcomes.

**Results:** Mean overall satisfaction score was 8.9/10 and 28/29 (96.6%) would recommend the procedure. The most important factors in aesthetic outcome were symmetry (10/29, 34.5%) and shape (10/29, 34.5%). Eight (27.6%) reported mild/moderate restrictions in activities and six (20.6%) reported moderate pain; none reported significant limitation or pain.

**Conclusion:** LD flap reconstruction was associated with high overall patient satisfaction comparable to DIEP which is considered as the gold standard, and little functional or aesthetic compromise. The most important factor for patients was symmetry. Patient expectations and priorities should be a key point to address in a reconstruction consultation. The ultimate aim should be for an outcome which has addressed the factors most important to that individual patient.

#### 0763: EFFICACY OF TRIPLE ASSESSMENT IN COMPARISON WITH SURGICAL BIOPSY IN BREAST CANCER

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**Aim:** To examine, combined and individual predictive values regarding Palpation (P), Mammogram (M), Ultrasound (U) and FNAC (C)/Core biopsy (B) in Breast cancer diagnosis in relation to surgical biopsy.

**Methods:** 124 breast cancer patients reviewed between 1st April'09–30th March'10. For diagnostic potential of combination of the modalities (P, M and FNAC), we considered cases with score of 4 (Probably malignant) and 5 (malignant) in any of the modalities were considered positive for malignancy. All Patients diagnosed with breast cancer with triple assessment were found having breast cancer on surgical biopsy. 12 were excluded, unfit for intervention.

**Results:** (P) alone relatively accurate, confirmed by surgical biopsy. PPV 58.9% when compared with surgical biopsy, PPV 66.1% after ultrasound scan, the over Radiological grading (R) gives a PPV 81.3%, reflecting important role of ultrasound. FNAC 73.2%, comparable with other studies. Core biopsy diagnostic in 107 (95.5%). combination of the modalities (P, M, U, R, FNAC) is more accurate than any one modality, alone.

**Conclusion:** Cases with positive three modalities for breast malignancy; surgical biopsy confirms the breast cancer with a PPV 100%, sensitivity 95.5%. Results showed improvement when compared to previous audit. Furthermore, practice was in line with NICE guidelines and performance was well above standard required.

#### 0798: PRIMA: Y INVASIVE BREAST TUMOUR SIZE WITH AXILLARY METASTASIS IN ETHNICITIES

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**Aim:** To explore the correlation between breast cancer tumour size and axillary lymph node metastasis in new presentations, amongst an ethnically diverse patient population in an east London hospital.

**Methods:** A total of 131 patients were identified as first presentations of breast cancer over a two-year period based on the Trust's electronic database (excluding recurrent breast disease or histological anomalies). Tumour size was based on TNM staging and status of the axilla derived